# Smartphones use Linux OS as portable devices

|  |  |
| --- | --- |
| **Date** | 2021-12-07 11:36:19 |

Table 1. History and development of mobile phones (Velusamy et al., 2013). 1973 First mobile phone device by Motorola 1978 Advanced Mobile phone system (1G) 1990 GMS standard (2G) 1993 First smartphone by IBM with touch screen 1996 Windows CE Handheld devices. 1998 Psioncompany develops Symbian 1999 First Nokia phone with Symbian S40 (7110) 2002 First smartphone by Blackberry 2002 3G telecommunication technology 2007 Apple I phone with ios introduced 2008 Android 1.0 with HTC dream 2010 Microsoft launches Windows Phone OS 2011 MeeGo first Linux mobile by Nokia and Intel 2013 The Ubuntu phone \* Linux is suitable as an architecture for mobile phones because of the low RAM and CPU frequencies compared to PC hardware. In the journal by Velusamy et al 2013, middleware was an important component of the OS located between the kernel and application software. Middleware is supplied by third party vendors or open-source communities.